Atty Dkt. No.: 10002969-1 USSN: 09/625,916

## REMARKS

## **Formal Matters**

Claims 1-20 are pending.

Claims 1-20 were examined. Claims 1-20 were rejected.

Applicants respectfully request reconsideration of the application in view of the remarks made herein.

## Rejection of claims under 35 U.S.C. § 102

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Mason (5,712,480), assertedly because Mason discloses a data acquisition system that anticipates the claimed invention. The Applicants respectfully traverse this rejection.

The instant claims recite a data acquisition system including an accumulator that has two or more parallel accumulation paths and accumulates corresponding data samples across a transient sequence through different accumulation paths.

As such, any anticipatory reference should disclose a data acquisition system in which data samples are passed through different accumulation paths.

An exemplary embodiment of the claimed invention is most effectively viewed in Fig. 3 of the instant application. In the embodiment shown in the figure, the accumulation paths are interleaved. This arrangement of accumulation paths provides for the accumulation of data using different accumulation paths, which, in turn, reduces accumulated pattern noise.

Mason, on the other hand, discloses a data acquisition system that involves using the same accumulation path for each data sample in a transient sequence.

Mason's system is most effectively viewed in Fig. 12, where Mason's system is schematically diagrammed. The accumulator is in the top right hand corner of the figure. Data entering the accumulator is only processed using a single accumulator. There is no interleaving of the accumulators, and no means for data to be processed through anything other than a single accumulation path. In other

Atty Dkt. No.: 10002969-1

USSN: 09/625,916

words, Mason's accumulators are separate and add onto themselves, unlike those of the instant data acquisition system.

These observations are supported by statements made by Mason throughout his disclosure. For example, in column 8, lines 17-19, Mason states "Each FIFOn receives the output of its register REGn across a dedicated hardwired bus or data line generally indicated as...", in column 9, lines 14-16, Mason states "The two digital signals are sent down separate paths along output 280 with each portion maintaining its own tag or label", and, in column 9 lines 37-43, Mason states that each accumulation uses the same memory.

As such, Mason's acquisition system passes data samples across the *same* accumulation paths, and fails to disclose a data acquisition system in which data samples are passed through *different* accumulation paths.

In making the rejection, the Examiner assected that elements 28 and 30 in Mason's Figure 2 are parallel accumulation paths. These elements are actually digital data paths that contain data of a unique form a, and multiple signal processing modules (SPMs) are required to spread data load. Further, the Examiner cites various sections of Mason's specification to support the rejection. However, these sections, at best, merely disclose that parallel processors may be used to increase machine performance.

Since Mason merely discloses a data acquisition system in which data samples are passed through the *same* accumulation paths and fails to disclose a data acquisition system in which data samples are passed through *different* accumulation paths, Mason cannot anticipate the claims.

Since Mason cannot anticipate the claims, withdrawal of this rejection is respectfully requested.

Atty Dkt. No.: 10002969-1 USSN: 09/625,916

## CONCLUSION

The applicants respectfully submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Timothy Joyce at 650 485 4310. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078.

Respectfully submitted,

Date: 9.12.03

Bret E. Field Registration No. 37,620

Date: September 12, 2003

James S. Keddie, Ph.D. Registration No. 48,920